

BUILDING BYE-LAWS

Zoning and Sub-Division Control

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BUILDING BYE-LAWS

ZONING AND SUB-DIVISION CONTROL

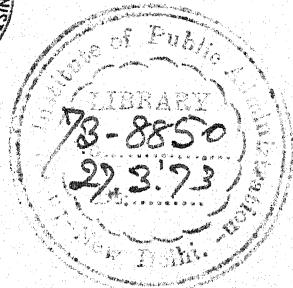
Proceedings of the Seminar

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CENTRE FOR TRAINING & RESEARCH IN MUNICIPAL ADMINISTRATION
INDIAN INSTITUTE OF PUBLIC ADMINISTRATION
INDRAAPRASTHA ESTATE, RING ROAD, NEW DELHI-1, INDIA

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NEW DELHI

FEBRUARY 1973

PRICE | INDIA : Rs. 4.00
 | ABROAD : \$ 1.30 or £ 0.50

FOREWORD

A Seminar on Building Bye-laws, Zoning and Sub-division Control was organised by this Centre in March, 1969. The printing of these proceedings has been taken up in response to a number of enquiries from various local authorities and institutions.

The Seminar was particularly concerned with the working and administration of rules and bye-laws in regulating building construction, sub-division of land and zoning. It was noted that while zoning regulation has been minimal in the Indian cities, the powers available to control sub-division of land have hardly been exercised so that there have been considerable unauthorised development in most of our cities. As regards the building bye-laws there was a concern on the one hand for proper codification of such bye-laws to meet modern standards and on the other, about the capacities of low income groups to satisfy any high level of construction codes. The participants were also very much concerned about the wide-spread violation of building bye-laws and the need of streamlining their administration.

It is hoped that these proceedings will help in guiding local authorities in their policies of building and sub-division control. I am grateful to Dr. B. D. Raheja who put in considerable work in the organisation of the Seminar and to Shri Mulkh Raj who helped in the drafting of these proceedings. I also thank Shri M. K. Narain, Research Assistant in the Centre and the office staff for reading the proofs, and seeing this publication through the press.

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Director

(CMA)

NEW DELHI

12TH DECEMBER, 1972

INDIAN INSTITUTE OF PUBLIC
ADMINISTRATION

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INTRODUCTION

The impact of Building Bye-laws, Zoning and Sub-division regulations, particularly the latter on the quality and quantity of housing supply and city environment is not always appreciated. The facts and forces of urban growth are making it imperative to intensify use of existing urban sites or to bring more and more rural lands under urban uses. A framework to control and regulate this phenomenon of city expansion is essential to make not only the existing but even future human settlements, "safe, orderly and beautiful". The seminar voiced the widespread feeling in knowledgeable quarters that the rigidity of these regulations is hardly conducive to any massive development in house-building activity especially among the middle and low income groups of citizens. Acute shortage of housing on the one hand and low levels of income on the other, conspire to pull in opposite directions and accentuate slum conditions. The needs of appropriate standards as regards quality of structure and urban design add to the complexity of the problem.

The seminar discussed the various aspects of the preparation and enforcement of building bye-laws as well as sub-division control and zoning regulations. A summary of the paper presented and discussions held is given in the next section. Broadly the following issues emerged from the discussion.

(A) Building Bye-laws

- (a) The administrative aspects of the enforcement of building bye-laws presented a serious bottleneck in the way of

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achieving the ultimate goal of orderly development of the city.

- (b) The building bye-laws were often too rigid to take into account the varying conditions in the different sectors of the city and rapid changes in the city economy.
- (c) There were many difficulties in evolving a uniform code of building bye-laws. The needs of the weaker sections of the society and inter-area city requirements pose many problems of incompatibility.
- (d) The staff entrusted with the working and enforcement of building bye-laws lack the requisite technical know-how. The seminar voiced the need of adequately trained cadre to handle the job.

(B) Zoning Regulations

- (a) Legal, administrative, socio-economic and political difficulties were being encountered in the drawing up and enforcement of zoning regulations.
- (b) Frequent exemptions from operation of zoning laws defeat the whole purpose of pursuing this tool in land use planning.
- (c) There was inconclusive discussion to identify a viable alternative to zoning regulations. The concept of zoning was too sophisticated and needed special resource inputs for its application; with the result that only a few cities were able to formulate such regulations.

(C) Sub-Division Regulations

- (a) The difficulties of the civil authorities to control violation of sub-division regulations were brought out.
- (b) It was widely felt that the operations of sub-division and land development should be undertaken only by the government or a statutory body.
- (c) The incompatibility between sub-division regulations and low income housing needs emerged again as a constraint.
- (d) The lack of adequate resources and trained manpower

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renders sub-division provisions in the municipal laws more or less ineffective.

A brief analysis of the discussions held at the Seminar is given in the following paragraphs.

(A) Building Bye-laws

(i) *Administration*—The seminar focused attention on the administrative bottlenecks as almost all the participants referred to many difficulties being faced in enforcing modern sophisticated rules and bye-laws. It was felt that the existing administrative framework to enforce the building bye-laws, and the procedures for getting the building plans scrutinized or sanctioned are too cumbersome and dilatory. The citizen is often subjected to undue harassment and avoidable expenditure. A plea was put forward by some participants that the citizen may not be required to apply for routine addition and alterations through an architect.

In cases where the plan has to be sanctioned by a number of local authorities and particularly for structures on leasehold plots, the citizen has to cross many a hurdle. Recently in some leading municipal corporations, steps have been taken to streamline the administration. Building plan committees have been formed and zonal arrangements made to speed up the sanctioning of the plans. Energetic efforts are being made to identify reasons for delay and steps taken to remove them. It was claimed that this streamlining of administration and decentralisation of authority have made an apparent impact in the achievement of the twin objectives of quick disposal of cases and reduction in the areas and levels of corruption.

(ii) *Rigidity of Building Bye-laws*—Many difficulties originate from the fact that the building bye-laws are too rigid and have failed to take into account the changing technology of construction industry, etc. Most of the standards prescribed in the bye-laws are often found to be obsolete and outdated as some of them had been framed a couple of decades ago. There are uniform bye-laws applicable throughout the city, irrespective of the disparate needs of various zones or localities depending on

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land uses and development patterns. Could you really control and regulate the architectural design and city requirements by these outmoded bye-laws; was a general question asked by both the peoples' representatives and the experts ?

Some of the participants referred to the in-built deficiencies of these bye-laws that could be traced to the limitations of the Municipal Act itself. As an instance it was pointed out that some of the State/Central Government agencies and departments were violating the building bye-laws and executing their building plans without even making a reference to the local body. Most of the speakers were in favour of making the local body as the supreme unitary authority for sanctioning building plans for all sites within its jurisdiction.

(iii) *Uniformity in Bye-laws*—Though inter-city variations need to be reflected in the bye-laws, the uniformity of standards, in essence, was considered to be helpful both to the citizen and to the city Government, as qualified architects could then attain more inter-city mobility. The experts who presented the papers outlined an ideal uniform clause system of bye-laws which could subsume these variations. The national organisations like Indian Standards Institution and the National Building Organisation could greatly help in achieving this goal of "uniformity with diversity".

One of the basic hurdles in the programme of framing an ideal set of building bye-laws was the so-called incompatibility between the low cost housing and the requirements of building bye-laws. It was not possible to achieve any agreement on this controversial issue and the discussion produced more of heat than light. There were, nevertheless, many suggestions detailing the possible relaxations that could be extended to the weaker sections of the community in the cities. These pertained to the size of the room, height of the walls, the setback areas, the number of storeys, the material used and the size of the plot. There were some dissenting notes, which emphasised that with economic growth, the standard of living of people was bound to improve and any delineation of standards and relaxations on the basis of existing income levels would complicate matters in

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the future. The reduction in various standards in course of time would *ipso facto* lead to encroachment and infringement of bye-laws. The existing mushroom growth of unauthorised colonies and encroachments could be attributed to the prodigal standards adopted in our development control regulations. The sooner, one realised the reality, the better it would be for the individual and the community.

(iv) *Training Gaps and Needs*—Since many of the local bodies did not have the requisite technical staff to administer the building bye-laws an intensive training programme for building inspectors and engineers would go a long way in strengthening the administration. The trained staff would throw up a cadre well-equipped and well-informed about the procedures and technicalities with the will to learn progressive methods and procedures of making the administration of building bye-laws easy and smooth both for the citizen and the city officials. The need of organising courses in this specialised field was emphasised.

(v) *Future Shape of Model Bye-laws*—It was very difficult to identify precisely the future shape of bye-laws as it emerged from the discussion. But the contours of such a shape were no doubt visible. It was visualised that the future framework of building bye-laws should be simple, realistic and comprehensible to the common man. The changing material mix and also construction technology must also get reflected into it. If a uniform code could be evolved, with due regard inter-city situational variations, it would be ideal. There was general unanimity that the local body should have the power and authority to receive and sanction building plans for all departments, irrespective of the tier of government to which they belong.

(B) Zoning

The sub-division and zoning regulations have of late emerged as powerful tools of land use planning. The concepts were subjected to intense scrutiny by the participants. Serious doubts were expressed about the usefulness of these concepts in the Indian conditions whatever may be their validity in the west.

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The concept of zoning, which had its origin in the U.S.A. arose out of the 'law of nuisance' and later on emerged as a powerful tool in protecting the individual property rights from the actions of its neighbours.

Many participants commented on the usefulness of zoning in the Indian conditions. Zoning was "right in theory but political football in operation". The objections to the concept of zoning as a land use measure were broadly based on two assumptions :

- (a) Even in cities where the concept had a fair trial, its tangible contribution has been doubtful. There was no evidence that this original purpose attributed to it has been accomplished.
- (b) There was no evidence even in the United States that a zoned city was substantially different from an unzoned one so that if these land use control measures were based on such uncertain premises or at least unverified results, then why the society was being asked to undergo socio-economic and political cost which emanates from inherent weaknesses of these tools. No one really knew what the effects of the present system are. In spite of the spate of books and articles, monographs and handbooks written on the subject year after year we are still operating in the dark in understanding the consequences of land use controls.

In the absence of well qualified staff and appropriate resources, only a few metropolitan city governments have been able to take advantage of these regulations in India. Even there, the exemptions from operation of zoning laws are granted very frequently defeating the whole purpose of planning. The experience of Delhi shows that the delays in the preparation of the zonal plans have to a certain extent jeopardised the implementation of the Master Plan itself. Legal difficulties were being encountered in most of the cities. Often there was no statutory basis of enacting zonal regulations except in cities like Delhi and Bombay. There was a general consensus that due to lack of trained staff and resources, not many municipalities could avail of such detailed land use planning

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regulations—even in cities like Delhi where the administrative wherewithal exists, the encroachments on areas marked as 'green', in the master plan were being made with great abandon. The political support that the interested groups, responsible for infringements, have been able to muster, has made things more difficult. For instance in Delhi, during the last ten years, about twenty irregular colonies a year have been formed in contravention of the Master Plan, and half of them have since been regularised. The time has now come, it was voiced, to have a hard look at the efficacy and effectiveness of the concept in its existing form. A new approach was considered necessary for promoting optimum utilisation of urban lands and efficient land use. Some provisions in the municipal and town-planning legislation could perhaps be more effective than the enforcement of sophisticated detailed Zonal Regulations.

The struggle for shelter is a challenging problem of urban areas and if the authorities do not provide enough avenues to an ordinary man of getting it, he would squat and encroach on whatever parcels of land he can lay his hands on; disregarding the dictates of the law. Seen from this angle the inability to enforce the zoning regulations, it was felt, emanated partly from failure to make adequate provision for cheap housing settlement and partly on the slum improvement and urban renewal front. The representatives from some bigger corporations suggested that it was really not possible to push through urban renewal programmes unless the private sector was also roped in. The need was to offer some concessions to individual property owners to achieve these results. There was general consensus that efforts need be made to create necessary climate for pushing forward the above objectives.

(C) Sub-Division Regulations

Most municipal acts lay down procedures for sanctioning sub-division of land according to the conditions that may be prescribed by the sanctioning authority. In some case separate regulations have been prepared. The enforcement of sub-division's regulations too has run into rough weather. Since

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the regulations control the use, layout and development of vacant lands owned by different agencies and innumerable property owners, and there is increasing demand for small urban sites, the administrative pressures of enforcing the regulations have multiplied under the impact of urbanisation. Layout plans about the areas, both within and without the municipal jurisdiction, are being prepared disregarding the legal requirements. The representatives from many cities referred to colossal violations of sub-divisions regulations in their cities and underlined the obvious difficulties of the city authorities to control the large scale growth of unauthorised colonies. The need for pre-emption of right to land development by the government was underlined by many participants as a preventive measure. It was even suggested that the registration authorities should refuse to register the land transactions, unless the permission to do so was given to the parties by the city government or the appropriate development authorities.

The failure to evolve any administrative mechanism to check the rampant illegal sub-division of undeveloped land, has resulted in unhygienic living conditions for the common man, financial liability for the local government and frequent law and order problems in case the regulative powers are exercised. The response of the States to organisational changes in metropolitan growth, administration and government has not been adequate. The multiplicity of control on urban land sub-division and planning have created complex problems of inter-departmental and inter-governmental coordination. The disadvantages of half-hearted approach to land use planning and development, it was agreed, were enormous. The fragmentation of land use control due to the existence of multiple local authorities have accentuated the unwholesome competition between these authorities. Again the exacerbation of difficulties of administering the 'core' city and the suburbs have further made the application of these land use planning techniques well nigh impossible. The participants tardily progressed from regional planning to regional government in this respect. A regional government could be vested with some of the powers presently

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exercised by the State Governments without adequate effect.

(D) Concluding Remarks

The vicious problems that face the town planners, the economists and the politicians are many. The questions that remain unanswered are: How far the utilisation of urban lands synchronises with the aims and objectives of planning ?; How far the existing methods and approach to land use planning and control are successful ? The problems of land use planning and control are multi-dimensional and the land use meta-policy has to synchronise not only with one or two sets of economic or non-economic variables but has to weave a host of facts and forces into a viable and workable system. The most important dimension of the problem, however, is that the rights of citizens, especially of weaker sections of the society, are to be made compatible with the needs of planned urban development. In this connection there was detailed discussion about the minimum area of plot that should be permissible when the land is being subdivided. The proponents of reduction of minimum size referred to the needs of the poor as the justification, while the antagonists drew the attention to the deteriorating living conditions and potential 'land violations', such a measure would make rampant. Broadly, an observer of proceedings could say that there was a general consensus to take the needs of an average urbanite as paramount and plan accordingly.

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INAUGURAL SESSION

Dr. J. N. Khosla, Director, Indian Institute of Public Administration welcomed the participants to the seminar. He was grateful to Shri Hans Raj Gupta, Mayor of Delhi, for having kindly consented to inaugurate the seminar and complimented him on his efforts to invigorate the municipal administration in the country.

He remarked that the essence of the whole subject was to make towns and cities 'healthy, orderly and beautiful'. The tremendous growth of population in many of the towns and cities had brought in its wake haphazard urbanisation, slums and congestion. "Our municipal laws", he added, "provide for building regulations but their enforcement has not always been satisfactory and effective. In fact psychologically this aspect of municipal regulations has hardly gone into our frame of mind and we have virtually allowed things to drift away in our urban areas. It is gratifying to note that the Third Five Year Plan paid greater attention to planned urban and regional development and provided for drawing up of city and regional plans with cent per cent central assistance. The state governments too were becoming more and more plan conscious and town planning legislation has been brought into existence in a number of states but the more sophisticated techniques of zoning, subdivision regulation are yet to be adopted in our planning methodology." The seminar he hoped would have ample opportunities to discuss all the pros and cons of the different

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techniques and to suggest necessary amendments to the planning regulations.

"It has often been urged that our municipal building bye-laws are ancient and new bye-laws have to be adopted. Obviously such criticism raises a basic question about the evolution of proper standards for different aspects of building, town planning and the use of zoning and sub-division regulations." The discussion he hoped would "undoubtedly touch upon the specific issues as to what should be prescribed for buildings in various kinds of towns and cities so that house building activity goes on unabated and yet in such a manner as not to endanger public health and safety." "Naturally", he added, "the administrative and legal aspects of the subject will also receive the attention of the participants." He emphasised the human aspects of this apparently technical subject. Dr. Khosla concluded his introductory remarks by thanking again the Hon'ble Mayor and the participants for their interest in the subject and requested Shri Hans Raj Gupta to inaugurate the seminar.

Inauguration

Shri Gupta said : "It is easy to inaugurate a Seminar like this but it is difficult to speak on such a technical subject and a subject on which the technical man and the ordinary layman like myself and my brother councillors, are likely to differ very considerably. For instance, let us take the Delhi Master Plan, which was brought into being after a lot of changes in that process."

He conceded that though "a certain amount of planning is essential for the proper development of a town, but when it comes to remodelling an old town, making changes here and there, then it is very difficult, as there are difficulties in the way of its implementation due to many other considerations. The primary consideration being the amount of money that would be required to implement this plan and the other constraint might be, as Dr. Khosla was mentioning, the human consideration. As a matter of fact, when it comes to the level of

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councillors, it is the human consideration, which becomes very important because afterall they have got to please their electorate; they have got to see that the town really develops in an orderly manner. Now it is very difficult, therefore, to stick to any plan even though it might have been drawn up with a considerable amount of care and attention. These other considerations have to be taken into account."

"Although the councillors know all about municipal subjects, but in these matters they have got to appreciate the point of view of the experts and also to tell them as to where the shoe is likely to pinch, so far as their own town is concerned. The discussions at a Seminar like this are bound to prove very fruitful. It may be that only one seminar of this highly technical subject may not be enough but it sets people thinking and it would probably enable us to define our ideas much more clearly and we will be able to appreciate how far the various regulations in respect of zoning or building bye-laws are likely to affect the community. In the matter of zoning, probably, there may not be much difficulty about the new areas which are going to be developed but, when it comes to existing localities, it is bound to create lot of headaches."

"The building bye-laws", continued Shri Gupta, "also need to be modified." He quoted the example of Delhi, where "The old building bye-laws have been slightly modified because we find that people insisted upon carrying on their unauthorised constructions most of the time and it was very difficult to check them because in more than one case they applied for repairs and not new constructions. Building bye-laws had to be changed and in certain cases they were allowed to carry on such minor constructions without sending the plans to the Municipal Corporation. But the trouble was still going on." He hoped that the participants will be able to give some guidelines which will be helpful in almost all the towns of the country.

Prof. G. Mukharji, Director of the Centre, thanked Dr. J. N. Khosla and Shri Hans Raj Gupta for their thought provoking addresses. He agreed with Shri Gupta that the two groups who were most concerned with the subject were the councillors and

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the technical persons. He remarked that one had to see whether in the present socio-economic circumstances, the building bye-laws are sufficient to meet the current requirements of the people. Though the housing today occupies a low priority but sooner or later housing will come to occupy the position it should have in any kind of hierarchy of priorities. In a city like Delhi, where 60 per cent of the population cannot build a house since it costs as much as Rs. 35,000, he posed a question "If he cannot do it, then what are the other solutions? How do we evolve our building bye-laws so that he can build a house. These are the questions which arise at the outset" and he hoped "that experts would be able to advise about the feasibility of changes. They will also appreciate the need of housing on the part of the poorer section of the people. The elected councillors will be able to explain exactly what are the problems faced by the poorer house builders." He hoped that as a result of the discussion some sort of new thinking on the subject would emerge.

FIRST SESSION

Kumari Surrinder Saini, Vice President of New Delhi Municipal Committee was in the chair. The chairman welcomed the delegates and requested Dr. B. D. Raheja of the Centre for Training and Research in Municipal Administration to read his paper—"Sub-Division Regulations, Zoning and Building Bye-laws". Dr. Raheja pointed out that in a predominantly agricultural country, it required extra-ordinary effort to predict the dramatic changes in the cities and towns arising from the rising tempo of industrialisation and urbanisation. Vast improvements in agriculture and the rapid developments in transportation and communications systems will produce phenomenal effects in redistributing population of all regions and bringing them together in the existing and the newly developing urban and metropolitan areas.

Of all the towns in the country, the cities and towns in the upper four classes contained the largest number of people and the smaller towns were disappearing steadily. In the urban

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areas one was confronted with more complicated situations, where uncontrolled use of urban land and property to one's advantage caused serious difficulties. If it was left to the play of market pricing system, it may not promote efficient coordination and adjustment of private interest and public need. The Constitution of India, public laws—Central and State, rules and regulations on the one hand and public policies and programmes on the other, influence the institutions of private property and determine the uses in the urban area. The frustrating gap between demand and supply of housing in the cities, town-groups and towns had resulted in the greater congestion in the existing stock of housing, leading to greater intensity in additions and alterations in the existing houses and serious violations of building bye-laws and land uses. In 1961 against the total population of 43,92,34,771, there were 7,88,55,586 occupied residential houses and 6,89,48,516 households in the country. On the other hand against an urban population of 7,89,36,603 there were 1,37,85,314 occupied residential houses and 1,55,63,371 households. He went on to observe that in India, city and regional planning was gaining increasing recognition and the State Governments had enacted laws and formulated rules and regulations to control and regulate the urban and metropolitan growth. Town planning laws were in force in the states of Tamil Nadu, Andhra Pradesh, Kerala, Maharashtra, Gujarat, Bihar, Mysore, Assam and Orissa. In addition, there were a few laws dealing with town improvement, peripheral control and slum clearance in some States. The need of public control of uses of land and buildings was being increasingly recognised by the legislative and judicial agencies in the country. Sub-division, zoning and building bye-laws were the basic tools which were gradually being applied by all levels of government in order to ensure orderly growth and development of urban communities. Gradually, cities and towns were preparing master plans either at the initiative of Central and State Government or on their own. A master plan involved the requirement of sound building bye-laws, zoning and sub-division codes and unless these basic tools were provided, master plan

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will be merely a pious document for academic purposes. We had been experiencing, continued Dr. Raheja, that new areas were being sub-divided and disposed of with sub-standard and inadequate provisions of public and civic amenities, thus causing serious long-term problems such as marginal development, open waste lands and even defunct or uneconomic housing or industrial colonies. By insisting upon well-designed and well developed sub-division, it was possible to ensure high standards of public and civic amenities and to avoid the pitfalls of congestion, concentration and chaos in the existing urban areas.

Zoning according to Dr. Raheja helped in controlling the location, function and also the aesthetic quality of residential, commercial and industrial structures in the urban areas. Through zoning the police powers of the State were exercised to promote the best interests of the community in accordance with a master regional plan and to seek compliance of various Central, State and local statutes, rules and regulations concerning urban and suburban growth. The most significant objectives of zoning were to lessen undue concentration of population and economic activities to provide an efficient system of transportation, and circulation and to secure water supply, storm water drainage, sewerage and other civic amenities.

In the urban and suburban areas, zoning in his view, generally consisted of three basic types of districts such as industrial, commercial and residential. In determining these zoning districts one was faced with several alternatives which would permit the modification of the existing and future land use patterns in the urban and suburban areas. Though it was not possible to suggest any guidelines about details of the zoning districts, the zoning ordinance, he said, would always be subjected to modifications and amendments in response to rapidly changing characteristics of urban and metropolitan areas. In most of zoning districts it was likely that non-conforming uses of land would continue to exist and create serious problems of reallocation and rehabilitation. According to him the time had come, to present the property owners with an alternative of either complying with the bye-laws or surrendering

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the property for public use. The existence of slums and blighted areas called for strict enforcement of building bye-laws, zoning and sub-division regulations with the pooled resources of all levels of government—local, state and central. Thus the specifications of building bye-laws etc., he concluded, become the crucial determinants of public policies and private investment decisions in implementing slum clearance schemes. The decision to use building bye-laws etc. to implement slum clearance schemes must be reached after careful consideration of several factors. The building bye-laws could not expect any basic structural repairs, elimination of existing undesirable uses or significant extensions in the remaining life of the houses and buildings. However, the slum clearance schemes must insist upon minimum compliance of building bye-laws with a view to restoring economic uses of land, to enhance tax revenues and reduce the cost of public services and civic amenities.

Referring to the political and administrative problems of enforcing sub-division and zoning regulations, Dr. Raheja continued that the crisis in regional planning *vis-a-vis* sub-division regulations, zoning and building bye-laws was not a crisis of planning concepts or ideals but one of political or governmental organisation. The problem cannot be solved through make shift administrative reorganisation and *ad-hoc* agencies. It was necessary to examine administrative organization, methods, and procedures with a view to locating friction points among central, state and local governments which grow out of these disparities and suggest measures by which inter-governmental relations could be improved. In all these control and regulatory measures, the problems of enforcement, coordination methods, procedures and evaluation were critical to their success. At the same time, the effectiveness of laws, regulations and bye-laws depended not only on their thoroughness but also on honest, enlightened and consistent administration at all levels, by all concerned. The task of guiding urban growth and development, reminded Dr. Raheja, was fast going beyond the resources of the local bodies and efforts need to be directed in creating metropolitan/regional planning bodies. The problems of government in the metropolitan areas,

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cities and towns were being tackled through various approaches such as extension, annexation, consolidation, statutory authorities, inter-governmental contracts and agreements, etc. It should not be concluded, he said, that any one of these approaches would solve the problems and it may be advisable to consider combining the salient features of some of these approaches to accomplish the objective. What was vital to the development of urban and metropolitan growth was a recognition of the hardships and inadequacies of the existing municipal corporations, municipal committees and other urban local bodies. A great deal, he observed, remained to be done.

Shri P. B. Rai, Additional Town and Country Planner, Town and Country Planning Organisation, New Delhi, was next requested to present his paper—"The Place of Zoning and Sub-division Control in Municipal Administration". Shri Rai stressed that the concept of land planning was not limited to the preparation of land use map only; rather the function of land planning was to ensure that the land uses indicated in such a plan were developed and maintained to promote public health, safety and the general welfare of the community and were utilised in the most appropriate and economical manner. It was well nigh possible that even if one succeeds in segregation of land uses, each use by itself may in turn create unhealthy conditions so as to constitute a nuisance not only to itself but to the adjacent use and in its cumulative effect detrimental to the welfare of the city as a whole. Zoning and sub-division regulations, he said, were only the tools for effectuating the land use plan. In their absence, sub-standard growth was likely to take place which would require costly corrective measures in future. Zoning regulations apart from others would lay down the land uses and the various standards according to which land plots should be developed.

When urban growth was taking place at a tremendous pace in the country, it was of the utmost importance, he remarked that new developments in our cities were in broad conformity with the guidelines set up by the Master Plans. It was also important that the standards of developments were such, that

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they were able to provide enough amenities to the people who were going to live there for decades to come. No doubt, municipal bye-laws lay down the requirements regarding the laying of water mains, sewers, drains, grading and surfacing of roads which a developer had to conform to when a colony was approved by the local authority, but those bye-laws were mostly outdated and in a growing city were generally of a lower order.

The other important aspect according to him was that subdivision regulations must also deal with the space standards for community facilities like schools, parks and open spaces shopping and other community requirements and the width of roads. In order to be able to specify these, the Master Plan should have arrived at a hierarchy of community life where the facilities are provided in groups or individually at various tiers. In bigger cities, these tiers may be many and complex but in smaller cities these are few and simple. It would be however unwise, he cautioned, to insist on very high standards when the community could not afford it. On the other hand if the standards were too low, the local body would be burdened at a later stage with the task of finding land for providing the community facilities or be satisfied with overcrowded facilities. A fine balance, he said, needed to be struck between the realities of the present and the good of the future.

Zoning, he maintained, tried to protect each use not only from the harmful invasions of other uses but also promoted the most economical and healthy use in each zone. By requiring the spacing of buildings it provides adequate light, air, protection from fire, etc. It prevents overcrowding in building and land and thus facilitates the adequate and continued provision of water, sewerage, transportation, schools, parks and other facilities.

The establishment of use zones and the spelling out of the various main, incidental, as well as, ancillary uses which may be permitted in such a zone, he said, were primary to any zoning regulations. But these alone will not be adequate. It should also lay down the specific conditions that should be satisfied before certain uses could be allowed by the Planning Authority in a particular use zone. It should specify parking

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and other standards that are the pre-requisites of orderly development.

Zoning regulations, he held, were not retroactive as far as existing land uses were concerned but had been upheld by the courts if they had provided clauses which would gradually eliminate non-conforming uses without inflicting unreasonable hardships on property owners. Good zoning regulations lay down the time schedule and the priority for such removal of non-conforming uses. In any such scheme of removal, the elimination of obnoxious and nuisance industries from residential areas should be the principal aim. Prevention of extension and intensification of non-conforming uses were by themselves disincentives for the continuation of these uses in undesirable locations but if these were coupled with positive incentives like provision of alternative plots with water and power, loan for relocation, etc., then the task would be easier when once the initial resistance was got over by enlightened public relation-ship.

He commented that it would be wrong if one had the same set of regulations for all areas in the city and different types of cities. Unless the zoning provisions allowed more intensive use of residential areas in the core and enforce the exclusive use, invasion by commercial uses into residential areas could not be stopped.

The administration of land planning regulations, he said, ought to be administered in a different manner, than say, through building bye-laws. The latter were rigid and applied uniformly, whereas zoning and sub-division regulations were different for different zones and areas and were applied with a view to achieving quality as well. It would be next to impossible to lay down rigidly and spell out specifically all the things that go to make out a good layout. However the necessity exists of laying down more and more specification for the guidance of the developer and the people administering the regulations who may otherwise appear arbitrary in their decision. Thus he suggested that there was a necessity for a small committee of experts to deal with administration of sub-division regulations whose chief aim

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should be to inspire in the developer a high standard of development rather than poor quality layouts satisfying all the quantitative aspects of regulations. He added it was sometimes difficult for laymen and non-technical people, who were familiar perhaps with building bye-laws to understand the finer points in the quality of sub-divisions. Zoning regulations, he remarked, were even more difficult to administer. A certain amount of maturity of understanding of the basic principles of land planning was required in order to be able to deal with conflicting claims of land use. He suggested the setting up of a "Board of zoning appeals consisting of 3 members, meeting almost every week and taking decision after inspection of sites to deal with any cases of hardship." When a land use plan is prepared, municipal authorities have an important role to play in administering these regulations. It was necessary, he said, that they had adequate enforcement machinery to ensure that regulations were not disobeyed. It must be recognised, he concluded, that a plan was no better than the people, who administer such plans and municipal administrations had a great role to play in this vital aspect of administration and enforcement of good land planning.

After Shri Rai had read out his paper the Chairman requested Shri S. K. Dutta, Senior Architect, Calcutta Metropolitan Planning Organisation, Government of West Bengal, to present his paper—"Selected Aspects of Sub-division Control in An Urban Area".

The purpose of his paper, he remarked, was to discuss the problems associated with the physical development of the community and suggest some approaches to achieve minimum standards of development, either to develop new areas of growth or old places. The objectives in planning housing areas were to provide sufficient living space within and around the building, to control the space between, to provide community services and convenient location of the houses in relation to the urban area with easy access to the locality. The density of particular areas should be in uniformity with technical and economic factors. He quoted the example of Calcutta, where

major part of the areas were developed by small private developers both in and around the municipal corporation jurisdiction. The land was sub-divided with a sole purpose of making maximum profits with the result that almost in every case the poorly designed areas, were examples of non-coherence in the respective environment. The application of Sections 370, 371, 381 and 382 of Calcutta Municipal Bye-laws, he observed, could be helpful with certain amendments in checking sub-standard development. Most of the haphazard growth has taken place due to violation of Sections 370, 371 and due to the special permissions granted under Section 382.

Apart from his suggestion regarding the width and length of the road for particular cases, in general, he suggested the following measures, for giving approval to lay private roads:

- (1) Permission should be granted for the sub-division of the land for the plots abutting the private roads which must adhere to Corporation Bye-laws.
- (2) Permission should be granted for the development of the plots abutting the private roads which were connected by one or more private roads adhering to Corporation Bye-laws or with the public roads.
- (3) No permission should be given for the development of plots abutting the private roads adhering to Corporation Bye-laws, and at the same time not connected to the corporation or public road, by such private roads not conforming to the Corporation Bye-laws.
- (4) Where buildings had already been built on the basis of sanctioned plans abutting a private road and not according to Section 371, no further permission should be granted for the development of plots until and unless roads in front of the proposed buildings were widened by making gift of land to the Corporation.
- (5) If any private street or part thereof did not conform to bye-laws [Section 371(1)(b)], owners of such street or part and owners of the lands and buildings fronting or abutting such street or part should be served with notice to carry out any work for levelling,

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flagging, channelling, sewerage, drawing and lighting of street to the satisfaction of the Commissioner.

(6) Separate rule should be framed as regards permission for premises abutting common passage or pathway not being a private street. The width of such passage should not in any case be less than 3 metres, terminating at one end in a public street or a projected public street.

The Commissioner, he added, should not grant special permission for the erection of new building, in case (i) the passage or pathway apertaining to such site, gives access to three or more buildings, and (ii) unless the width of such passage or pathway is 5 metres or more. At present, he said, no such rule was in existence to guide private developers regarding subdivisions of land, prescribing minimum sizes of plots for the use of commercial, industrial and residential purposes.

In formulating proposals regarding the construction of buildings, it was necessary to limit the intensity of land use by prescribing Floor Area Ratio and permissible covered area. The new development, he said, should take place according to zonal development plans. The interim land use contract for certain area and land use allocation shown in the urban structure plan had to be kept in view while sanctioning the plans of industrial buildings and warehouses etc. It was possible for the Corporation to draw up a set of recommendations to apply Sections 436, 437 and 439 for giving permission to set up a factory, use of premises for certain purposes with licence, etc.

But the above Sections, he cautioned, would not give any scope to the Corporation to refuse the construction of any type of building anywhere within its boundaries, unless and until Section 381 was amended as below :

- “(1) The elevation and construction of all new buildings hereafter erected shall, in respect of the architectural features be of such a qualifying standard as the corporation may consider suitable for the respective streets or localities.
- (2) The erection of the shops or any particular class of shops or building of warehouse class will not be allowed.
- (3) The erection of shops or of any particular class of shops

or building the warehouse class may be allowed with the special permission of the Corporation.

(4) The erection of buildings allowing attachment with adjacent buildings on either side may be allowed provided buildings are of similar use and possess identical architectural features."

He concluded with the observation that the above suggested amendments of Municipal Act might be helpful in ensuring architectural standard and in planning the desirable location of Industries and Trades within the confirmed areas.

Discussion

After the papers were read the chairman threw the matter open for discussion. Dr. B. D. Raheja, Shri S. C. Khandelwal, Shri P. B. Rai, Shri S. K. Dutta and Shri R. K. Ganatra took part in the deliberations. One of the participants remarked that the major problem in urban areas was one of density and of orderly growth of the city complex. A development plan costing between Rs. 750 to Rs. 1,000 crores had been prepared for Bombay. But the main problem, he said, was as to how to mobilise such huge resources. Referring to the paper circulated by Shri V. D. Desai, Chief Engineer, Municipal Corporation, Bombay, who could not be present, he said, it was obligatory under Development Plan Control Rules to submit a layout showing internal roads, access roads, 15 per cent or 10 per cent (as the case may be) recreation ground, keeping vacant the sites earmarked for public users in the Development Plan, etc. However, development by way of roads, sewers, storm water drains, water main gardens, schools, markets, etc. is a 'must' under the development schemes. This essential obligation was entirely ignored by private developers in the past. Many cases had been brought to notice where, while carrying out the repairs to buildings in pursuance to notice under Section 354 of the Bombay Municipal Corporation Act, owners had chosen to repair the building, amounting to almost its reconstruction in contravention of the Development Control Rules. There were about 8,000 buildings in Bombay which are nearly 100 years old. In view of the

housing shortage in the city, which would definitely continue for some years, such wholesale reconstruction was being permitted subject to compliance with certain conditions. Once having made the relaxations, which the community well deserved, any further dabbling with the plan should be avoided.

Referring to the nonconforming uses, he maintained that the authorities should give sufficient time to enable them to adjust their uses in accordance with the zonal regulations. But the real problem arose out of the different land use plans of various government authorities. For instance the Maharashtra Housing Board did not consult the Corporation in preparation of their building plans. He concluded his observations by thanking the Institute for giving him an opportunity to attend the seminar.

The forenoon proceedings came to an end with the chairman thanking the speakers and participants for their thought provoking ideas.

SECOND SESSION

Prof. R. B. Dass, Director, Regional Centre for Training and Research in Municipal Administration, Lucknow, was in the Chair. The proceedings started with the chairman requesting Prof. G. B. Krishna Rao, Assistant Professor of Planning, School of Planning and Architecture, New Delhi to present his paper—"Development Controls Through Zoning Laws, Sub-division Regulations and Building Bye-laws". Most of the land in Urban areas, Prof. Rao observed, was under private ownership. Due to paucity of funds and other practical difficulties, it was not possible for public authorities to acquire large tracts of lands within municipal limits for being developed in a planned manner. Hence to achieve this objective, he said, the authorities would have to depend heavily on using "police powers" by enforcing zoning laws, statutory town-planning scheme provisions, building bye-laws and municipal acts provisions, on land developments undertaken by private individuals. Control over development and use of land and buildings by local authorities might appear to be an interference with traditional

property rights and individual liberty but such control in some degree was inevitable if chaotic growth of towns was to be avoided. The primary purpose of land use controls, he observed, had been traditionally taken to be to "promote the health, safety, morals and general welfare of the Community". In fact during the last hundred years, the growth of towns and cities in India had been influenced more by the enforcement of municipal acts and building bye-laws rather than by implementation of Master Plans.

A Town Planning Act, he remarked, really came into force only when the Master Plan or an area planning scheme had been prepared and got sanctioned under the provisions of such an Act. The significance of development control through the enforcement of municipal act, zoning laws and building bye-laws arises from the fact that these were the only instruments available for controlling effectively the developments in the cities, till statutory planning schemes could be finalised, specially in areas lying outside the limits of such planning schemes. He then compared the situation as prevalent in the United States and India. He observed that in U. S. A. sub-division regulations had been framed and promulgated by the local authorities. In India powers for control over land sub-division were available under the Municipal Acts and there was no need to frame separate sub-division regulations except in cases of new industrial townships where the Municipal Act might not be in operation. There was an obligation normally under the Municipal Act that if any owner of land utilised or sold sites for buildings, he must, have in such cases, where the site abuts an existing street, lay down streets giving access to the sites. The Municipal Act, continued Prof. Rao, also specified normally, that the streets shown in the approved layout plan should be properly levelled, paved, metalled, flagged, channelled, seweraged, drained and lighted to the satisfaction of the Council before the plots would be built upon (e.g. Section 375 of Calcutta Municipal Act).

Though the above powers for sub-division control in the Municipal Act sound good and adequate for ensuring proper

growth of towns, he cautioned, there was a wide gap between theory and reality due to the indifference of landlords to these laws and slackness in law enforcement. Land owners, he said, kept on sub-dividing their lands and sold the plots without getting the layout plan approved and without caring to form the streets in the prescribed manner. The Registration Department was not obliged to verify, if a layout plan was approved by the municipality before registering a sale transaction for a site. Even if that had come to the notice of the local body and if they take action (which they rarely do), the party was usually prosecuted in a court and let off with a nominal fine.

While the landlord, he observed, had thus indulged in land speculation and reaped good profits without discharging obligations laid down by the Municipal Act, the parties who had purchased the plots, did not feel the responsibility for forming the streets, leading to their plots, before erecting structure on them. They somehow managed to get licences for erecting structures even though there was no proper access to it. Later political pressure was exerted on the municipal executive officers for taking over these unauthorised streets and declaring them as public streets even though they were not formed to the prescribed standards. These streets had later become a liability on the municipal exchequer. The Municipal Act, he added gave powers to the local body to serve notices on owners of plots abutting the streets to carry out necessary improvements, and in case of non-compliance with notices, to execute the improvements itself and recover the costs, but such powers were rarely exercised.

The only remedy to this state of affairs, apart from stricter enforcement of sub-division regulations, he suggested, was for the Registration Department to insist on a no-objection certificate from the municipal authority before registering any sale documents for lands within municipal limits and their vicinity. This suggestion had been made earlier by town-planners, but the Registration Department unfortunately had been reluctant to agree to this procedure on the grounds that it would affect the efficiency of registration work.

A common defect with the sub-division regulation in the Municipal Act, he cited, was that the party sub-dividing an extensive area of land into residential plots was not obliged to set apart some land for parks and other community facilities. The sub-division regulation in the Municipal Acts, he suggested, need to be amended suitably, to incorporate that the owner would set apart in the layout plan, adequate open spaces as per laid down in Section 184-2b of the Andhra Act. He referred to another limitation of the sub-division provisions in which, they did not operate, if the plots abutting on existing street were being sold by the colonisers. This, he said, could create many difficulties in the future. Along with it he suggested that the law should prescribe a minimum size below which a plot should not be sub-divided even for purposes of inheritance.

Turning to the subject of zoning, Prof. Rao said that it was primarily an American innovation, introduced in 1916 when the New York city adopted a zoning ordinance for controlling the skyscrappers. He then compared the situation as prevalent in U.S.A. and United Kingdom. Zoning, he said, had not been practised in U. K. where development control was exercised directly from the Town Development Plans and under the provisions of the town-planning Act. In U.S.A., on the other hand, the Master Plan has been taken to be a general policy guideline for public and private investments and actually zoning had been practised in isolation from planning and often predated planning. While there was a certain amount of discretionary power vested with the planning officials in the British development control mechanism, the American traditional distrust of bureaucracy led them to opt for a rigid system of standards and rules, which constitute the zoning law. In India, he added, zoning laws were relatively unknown and usually there was no statutory basis for enacting them (In the form they are practised in U.S.A.). Bombay and Delhi were among the very few cities in India, that had zoning regulations. In many cities in southern India, he observed, zoning had been attempted in a limited way, by declaration of residential and industrial areas, under the powers conferred by Public Health

Act and the Municipal Act. The development needs of particular localities, had also been met in some cities by preparing detailed planning schemes (which would include a scheme map and scheme bye-laws on lines similar to zoning laws) for the localities. The object of zoning, he said, was to safeguard the character or amenity value of a residential or any other type of area, to conserve property values, control the density of development and promote the most beneficial location of industry and business. While building bye-laws and sub-division regulation, he said, imposed uniform standards over all plots in a municipal area, the advantage of zoning law lay in the fact that it prescribed different standards of development to them. He specified some of the typical sub-groups from the zoning ordinance of the New York city as follows :

Use—Group 1 Single family detached residential development.

Use—Group 2 Community facilities such as schools, libraries or museum.

Use—Group 4 Other community facilities such as Churches, community centres of hospitals

Use—Group 6 Retail and service establishment which are needed to serve local shopping needs.

Use—Group 10 Large retail establishments such as departmental stores.

Use—Group 17 Manufacturing uses which can normally conform to high performance standards and are compatible to adjacent residential areas.

Use—Group 18 Industrial uses which involve considerable danger of fire, explosion or other hazards.

Zoning laws, continued Prof. Rao, also attempted sometimes to get rid of non-conforming uses through 'amortisation' (*i.e.*, the use should be shifted or brought to the required performance standards within a specified number of years). No compensation was payable for amortisation, which had been pursued vigorously for such obnoxious uses as tanneries and junk yards. Buildings having non-conforming uses could be extended or re-built. At the same time, he said, that zoning

laws were not fool-proof and listed some of their defects in the light of American experience as follows :

- (1) Zoning had usually been a compromise with existing land use pattern. It had rarely been used effectively to guide the pace and location of new development.
- (2) Zoning had not been effective, normally in moving out non-conforming uses. Lack of provision for payment of compensation for amortisation of such uses had been a serious limiting factor.
- (3) Administration of zoning was very cumbersome, requiring considerable personnel. As a result many local authorities had little time and energy left for the more important task of planning.
- (4) Instead of being a follow-up of a master plan, zoning had often preceded planning.
- (5) Zoning sometimes proved to be too rigid a set of regulations to deal realistically with the dynamic changing urban area. For instance in central areas of cities, there was an intensive mixture of several land uses and one could not always designate such area for a particular use only. Exemptions from operation of zoning laws were granted rather too frequently and almost 90 per cent of appeals were upheld. While development control, like planning, should have a certain degree of flexibility, it should not yield to the play of almost every vested interest. Americans seem to believe, he observed, that land use control was 'right in theory but a political football in operation'.
- (6) Zoning placed emphasis on relationship that existed between them, which was the real objective in planning.
- (7) Like in the British land use control system, zoning enforcement officials should have some discretionary power to grant exemptions in minor cases without burdening Board of Appeal with all such cases.
- (8) Zoning leads to a degree of social and economic segregation, impossible to achieve by any other method and had been used as a tool for serving the interests of

certain classes of people (e.g. higher income 'whites' to the exclusion of Negroes).

In view of these defects, he remarked, that even the Americans had started evaluating the usefulness of zoning practices.

In the Indian conditions, he cautioned, it was not wise to make promulgation of zoning laws obligatory for all Indian cities due to paucity of funds and technical personnel. However metropolitan areas like Calcutta and Madras should have zoning laws at least for the key areas. Concluding his observations he said that the objective of zoning was normally achieved in Indian cities through enforcement of land use proposals in the Master Plans and the detailed planning schemes (which also include scheme bye-laws) for localities needing priority. Prof. Rao did not present that portion of the paper which related to the problem of Building Bye-laws. He, however, presented it in the forenoon session of the next day.

Discussion

After Prof. Rao has finished reading his paper, the Chairman declared the matter open for discussion. Prof. G. Mukharji, Prof. G. B. Krishna Rao, Shri B. N. Kange Gowda, Shri G. D. Bahri, Shri D. Ajitha Simha, Dr. B. D. Raheja and Shri Deva Raj were the ones who contributed to an intensive dialogue on the subject in the second session. The first speaker referred to the advantages that had accrued to Delhi from having a Master Plan though its implementation had been to a great extent retarded, due to non-finalisation of the zonal development plans. In six and a half years, not more than 40 zonal plans had been completed, with the result that the building activity had not been permitted to the extent desired by the people. This naturally lead to mushroom growth of unregularised colonies and rampant unauthorised construction. By the end of 1961-62, 103 unauthorised colonies had come up and were regularised. During the last four or five years another 101 unauthorised colonies had been formed and wait for regularisation. Even the liberal definition of repairs, he said,

had been misused for unauthorised additions to existing houses. Any attempt to thwart this type of construction had failed due to the stay orders. Although the Delhi Corporation saw to it that the stay orders were vacated, but still it was not possible to keep abreast with the number of stay orders. About non-conforming uses, he observed, that there was a tendency to bypass the municipal building requirements. To overcome the problem of non-conforming uses, he suggested that areas, where about 60 per cent of the residential area was used for commercial purposes, should be declared as local commercial area. The invasion of residential areas by commercial area had taken place because no provision for shopping complex etc. was made in the layout plans. In the new areas it was imperative, that after the layout had been permitted, the authorities should see to it that community facilities etc. come up along with construction of residential building that according to him could be achieved by compelling the developer to hand over such sites to the government. Unless that was done, he said, it was very difficult for the plot holders to exercise their right. He pleaded for central assistance to the local government to help to provide the essential services. In the end, he referred, to the declaration of certain slum areas as "Clearance Areas" in Delhi, as the only way to improve them was through urban renewal. But the main problem, he added, was one of resources. He suggested that a proper framework should be evolved to rope in private sector in the whole urban renewal programme. He cautioned that if the government insisted that after a private builder had reconstructed the house, he would have to accommodate all the uprooted tenants, then it was difficult to attract any investor.

He concluded his remarks by saying that more and more clarificatory provisions of the Master Plan should, as far as possible, be part of the building bye-laws. He disagreed with those who wanted to drastically reduce the minimum size of plot in Delhi as he feared that it would only create problems like unauthorised construction, encroachment etc. in the future.

The next speaker observed that the unauthorised colonies would not come up if the colonisers were expected to take the

concurrence of City Improvement Trust, Municipality and State Government before any construction is allowed. Another speaker cautioned that if the redevelopment plans were not put through, the implementation of the Master Plan would be in serious jeopardy. For that he suggested either the government take the statutory powers or the local bodies should be given powers with reasonable funds to acquire the land and enough powers to evict the tenants. The lack of these statutory powers and resources had lead to the failure of redevelopment programmes all over the country. He agreed with the observation that the stay orders had really acted as severe handicap in the implementation of Master Plan and maintained that the correct relationship between the judiciary and executive was very important in the implementation of special schemes.

Another speaker remarked that the bye-laws should have three pillars for safety *i.e.* for structure, fire and health. The building bye-laws in U. S. A. and Canada were entirely based on fire hazard. A study of eight building codes of different countries at Indian Standards Institution had showed that half of the booklets were devoted to fire safety. The zoning, he said, was not based on any architectural basis. The residential areas, he added, were separated from other areas, while in India the occupancy of the areas was always mixed one and made the job of zoning much simpler. One of the participants intervened in the discussion at this stage, and said that care had to be taken before one suggested zoning law for every city. He added that though the powers for zoning ought to be available in the Act but its use be left to the discretion of the municipalities. The municipalities, he continued, need not have zoning laws for the entire city except for the key and rapidly growing sub-urban areas.

The next speaker remarked that the need was to create proper climate for introduction of zoning and sub-division regulations. He cautioned that it would be hazardous to derive any conclusions out of one's experience at Delhi because the situation was so peculiar. He concluded his observations by saying that the need of the hour was to deal with the problems

on regional basis.

The Chairman then requested Shri Deva Raj to give his views. Shri Deva Raj raised a number of questions : "What really do we want to have in the context of what is provided in our laws and bye-laws ?; Are we concerned with the expanding new areas or the existing core areas of a town ?; What agencies were legally concerned with this activity ?" These functions in expanding areas of a town, he said, were being performed by the Improvement Trusts of other development authorities. The problem on the one hand he added was of re-developing the existing congested city areas and on the other of new areas and sites that could be developed according to a plan. The municipalities had certain provision in the law for regulating certain existing uses which were obnoxious, rather than to lay down general zoning control. These bye-laws did not give the municipalities any powers to prevent the use of an existing site from any purpose. The Building Bye-laws also make some distinctions and those for Bungalow areas make certain special provisions regarding setbacks, and proportion of covered area. But often properties with big compounds had been split into smaller lots and disposed of or they were turned into 'Kratas' or 'Ahatas' with mixed uses causing unhealthy conditions. He suggested that there should be powers granted in the Municipal Act to ask for proper layout plans with particular standards specifically laid down in the regulations as also to control and change existing land uses in the interest of a healthy environment. The next speaker, Prof. G. Mukharji, Director of the Centre for Training and Research in Municipal Administration, IIPA, observed that before discussing the usefulness of zoning and sub-division regulations it was necessary to go back to the history of zonal plan and it was very interesting that when the Delhi Development Act was passed first by the Parliament, not many knew about the Master Plan, not to speak of zonal plans. Mandatory provisions were incorporated into 'the act to divide the city into zones. The legislature used the 'zone' in the Act in the American sense and Delhi was divided in 136 such zones. Because of these legal provisions, no development could be

permitted by the D.D.A. or Delhi Municipal Corporation until zonal development plans had been sanctioned. The process for the sanction of the zonal plan as laid down in Delhi Development Act was very complicated and time consuming. He raised a question : If one cannot have fullfledged zonal regulations it was better to have the same results through some provisions ? The difficulty was that on the one hand we had technical people who want technical perfection—rightly so—and on the other hand we had administrators and political bosses, who were dealing with human beings and want things done. What was needed, he said, was the proper fusion of both by making bye-laws which were understood by the people and elicit their cooperation. Unfortunately in the whole sphere of Indian administration we were watching for the man to make a mistake and punish him. If one made the zonal law complicated by accepting the American interpretation, then the citizen would be in utter darkness and ignorance. It was good to have building plan sanction holiday, make simple building rules, produce top standard designs, sell them cheaply and help the people. Most of the people, continued Prof. Mukharji, did not understand the laws under which Master Plan was prepared. If they really knew it, there would have been much more objections to the plan, than mere 6000 or so that were received in Delhi or 3000 in Bombay. The participants, he hoped, would give some thought to two most crucial points, firstly as to what do we need, so that our towns grow in an orderly way ? Secondly what was that one could do today to enforce the laws to the satisfaction of the citizens ? With that the day's proceedings came to an end.

THIRD SESSION

Shri H. K. Audichya, Vice President of the Kota Municipality was in the chair. He requested Shri V. V. Bodas to read his paper—"A Note on Housing and Building Bye-laws in Delhi". Housing shortage in Delhi, he said, had assumed menacing proportions due to phenomenal increase in population from 7 lakhs in 1941 to 39 lakhs in 1969 and it was expected to go

up to 61 lakhs by 1981. To house this additional population, 5 lakh dwelling units are required in addition to 3.4 lakh units to clear the backlog. Another 10 lakh housing units would be needed to account for the probable delapidation of existing housing inventory.

On the basis of statistics available for the years 1955-56, 82 per cent of the households in Delhi earned less than Rs. 250 per month. The crux of the housing problem, he said, was to meet the housing needs of the weaker sections of the society. But he regretted that the process of land development and the operation of building bye-laws had lead to unnecessary delays in the construction of houses and for that he suggested relaxation in building bye-laws especially for the lower income group people. The low income group households earning less than Rs. 150 per month, continued Shri Bodas, should be housed on 30 sq. yds. plots and allowed to construct sub-standard houses. The households earning between Rs. 150 to Rs. 250 per month can pay economic rent of 3 to 4 storeyed single room tenements constructed by any local authorities or people themselves can construct small double storeyed tenements on 40 to 50 sq. yds. plots consisting of one living room and one multi-purpose room. He suggested the following relaxations to be given for these tenements :

- (1) The size of each habitable room could be 80 sq. ft. as against a minimum of 100 sq. ft. permissible under the building bye-laws.
- (2) The authorities could accept ventilation through ventilators above the doors, provided at least one of the doors opens outside or in a verandah. The area of these ventilators or windows could be reduced to 5 per cent of the floor area of the room instead of 10 per cent as at present specified in the building bye-laws.
- (3) The risers of stairs could be increased from 8" minimum prescribed under building bye-laws to 9".
- (4) The plinth height could be reduced to 9" instead of 1'-6" above the centre lines of the road as now prescribed under building bye-laws.

- (5) Ventilation for W.C. and Bath through shaft of 4×3 size could be permitted.
- (6) Staircases often create problems. According to the present building bye-laws staircases cannot be taken off from a balcony. It is suggested that use of balcony as landing space for staircases may be permitted.

For households earning between Rs. 250 to Rs. 500 per month, he added the government should allot 80 sq. yd. plots and the same relaxations in building bye-laws should be enjoyed by them as extended to households earning between Rs. 150 to Rs. 250 per month.

In addition to above concessions, Shri Bodas suggested, some further general relaxations for these households. The need, he added, was to give up the restriction of only one dwelling unit per floor. Rather, the authorities should accept two dwelling units on each floor on plots of 200 sq. yds. area and above. On plots of 500 sq. yds. and above the need was to accept even three dwelling units per floor. Presently also, practically on all such plots, two or more families were living on each floor. Even the Government has allowed the sub-letting of staff quarters. Therefore, he argued, that it was necessary to give some legal sanction to the present practice. The 3-1/2 storey construction, presently permitted on plots facing roads with 80 ft. right-of-way and above, should also be allowed on plots facing roads of 45 ft. right-of-way and above. In this connection he said that the Delhi Development Authority was already thinking in terms of raising the density wherever possible to take care of the rising population.

The prevailing practice of not allowing building activity until such time as all services have been laid out according to an approved service plan and passed by the Corporation, leads to considerable delay in the construction of houses. With a view to accelerating the construction of houses in new colonies, he suggested that building activity may be permitted as soon as layout plans of the colonies were approved and only partial development of services had been done. The laying of the internal services after approval of the services plan can be done,

during the period the houses get constructed. Until such time, as internal sewer lines are laid and trunk sewers completed by the Municipal Corporation, dry latrines with 'ever clean' type of W. C. seats could be put up. If there is delay in Municipal water supply, hand pumps could be installed. This will, however, be only a temporary arrangement until all the internal services get completed and bulk services provided by the Corporation. He concluded the paper with the hope that if his suggestions were implemented that would give impetus to the construction of houses particularly by low income group people.

The Chairman next requested Shri D. Ajitha Simha to read his paper—"Preparation of Building Bye-laws".

Building construction, he said, had been subjected for many years to legal control in the interest of safety and health. While there was general agreement on the need for regulation, specific applications in the form of building bye-laws had been frequently criticised on the grounds of imposing excessive expense and of failing to make adjustments to changing conditions. The responsibility for preparing or revising building bye-laws usually falls upon local committees. One of their first problems he added was to determine what source material was available and how they should proceed.

The building bye-laws, he said, contained the constructional activity within a certain locality in the interest of safety and health of the community. This safety could be spelt out as structural safety and fire safety. It was, therefore, necessary to protect the public from structural failure, fire hazards and possible public health hazards; efforts be made by the local committees to draw upon existing information for making local bye-law. It was also felt that such task could be entrusted to practising engineers, architects and the municipal officials.

Performance, continued Shri Simha, was the key for building bye-laws and the performance requirements ensure safety of the community be spelt out leaving quite a few details open for adjustments. This was what one calls performance approach *vs.* specification approach. The local bye-law, he said, could not be an isolated document but be a part of network of requirements

applicable all over the country. It would be noted that for large municipalities, the bye-laws would be very extensive but for smaller ones, the bye-laws could be simpler but they should be derived from the bye-laws of the major corporations to suit the needs of the smaller local bodies. It was clear that such a unification will help the municipal body and also the practising engineers and architects. He also emphasised its importance from the point of view of diffent agencies, central or state, initiating construction work in some local body when the significance of unified bye-laws would be greatly felt.

The enforcing authority, he remarked, should have in addition to bye-laws and powers, technically competent people to man the departments so that a broad perspective of the local bye-laws could be brought to the notice of the enforcing authority. He emphasised that quite often building bye-laws were drafted on the basis of some other existing bye-laws, in some other municipality and the relevance of some of the clauses for particular situations in the new municipality were obscure. In such cases a highly competent and technically capable building official could clearly see the need of such clause and suitably interpret it. It was therefore necessary that the local authority should invariably try to secure the services of competent technical persons to draft and modify the bye-laws and enforce them in the spirit in which they were written. If a single small municipality was unable to afford such technical person of such capability, two or three bodies of neighbouring areas could join for such services. The building bye-law, he stated, could be a good influence, guiding the general course of construction in a safe manner or it could be a means of hampering the growth of the community that it was supposed to protect. This is because if the requirements are severe so as to impose higher building costs than prevailing in other cities; new investment in housing and industries can be diverted elsewhere and rents may be increased. If the regulations were such, that they did not bear any relationship to service such as water and electricity, the community might be very severely affected. This aspect of the building bye-laws should be recognised by the local bodies when drafting the

same. It was therefore necessary, continued Shri Simha, that the technical personnel manning the departments in the local body should initiate a thorough study of the various bye-laws in operation and analyse their applicability to the requirements of the particular local body which would enforce the bye-law. For that it was necessary to appoint a local committee with a small membership with technical capacity for drafting the bye-law on the basis of a thorough survey of the needs of the city.

The collection of available material for the preparation of the bye-law was also crucial in the process. The Model Building Bye-laws and National Building Code of India prepared by the Indian Standards Institution can provide valuable guidance and broader perspectives.

He suggested a model pattern of arrangement of clauses in the bye-laws as follows:

Part I	DEFINITIONS
Part II	ADMINISTRATION
Part III	GENERAL BUILDING REQUIREMENTS
Part IV	FIRE PROTECTION (OR CLASSIFICATION OF BUILDING AND REQUIREMENTS BASED ON OCCUPANCY)
Part V	BUILDING MATERIALS
Part VI	STRUCTURAL DESIGN
Section 1	Loads
Section 2	Foundations
Section 3	Wood
Section 4	Masonry
Section 5	Concrete
	Plain and Reinforced Concrete
	Prestressed Concrete
Section 6	Steel
Section 7	Prefabrication and Systems Building
Part VII	CONSTRUCTIONAL PRACTICES AND SAFETY
Part VIII	BUILDING SERVICE

Section 1	Lighting and Ventilation
Section 2	Electrical Installations including Lifts
Section 3	Air-conditioning and Heating Accoustics and Sound-proofing
Part IX	PLUMBING SERVICES
Section 1	Water Supply
Section 2	Drainage and Sanitation
Section 3	Gas Supply
Part X	SIGNS AND OUTDOOR DISPLAY STRUCTURES

It would be noted, he said, that with the above arrangement it was possible to cater to both bigger and smaller municipalities by elaborating against the items given, taking into account the building activity in that particular area. This would also help in obtaining technical advice of an engineer or architect from various other areas as it would provide an immediate checklist for the local body knowing fully well the common arrangement in the bye-laws in other urban areas. Therefore, he urged, from the user point of view to make such an attempt at arranging clauses. He emphasised again that the use of national standards evolved by the Indian Standards Institution be made in drafting the local bye-laws either for materials or for design or for construction or for other aspects such as lighting, ventilation, electrification, etc. With these the local bye-laws will also have the benefit of technical regulations accepted by the country as such and any modification could be introduced as and when the standards are revised. In fact, to make this task a little easy for the local bodies particularly the major ones, the National Building Code was being prepared by the Indian Standards Institution making use of existing Indian Standards on various aspects of building construction. It was also written in a form suitable for option of the local bodies.

It was quite often felt, he remarked, that the results of technical advancements either within the country or abroad were not fully utilised by our agencies, because the local bye-laws did not permit the use of new materials or methods of construction. It was therefore necessary, he said, that cognizance

be taken for such advances and a suitable clause included in all bye-laws to permit use of new materials and methods of construction provided they satisfied the authority concerned as to its suitability comparable to other constructional materials and methods of construction. For this purpose, he suggested, that the local authority could recognize the established national laboratories to issue such certificates regarding suitability. That, he said, could be quite a workable proposition.

He added that the bye-laws should be continuously examined, amended and revised so that newly emerging factors for building construction should not be ignored particularly where the economies were concerned. He strongly suggested that the technically competent authority with the local body should make it a point of examining all objections and interpretation of bye-laws and issue as a matter of course, regular amendments and at regular intervals, say, of 4 to 5 years, revise the entire building bye-law and republish it.

The building bye-laws, he said, were not always very clear and, therefore more than one interpretation could be given of a clause. It was, therefore, natural that the owner of property would always have some dissatisfaction *vis-a-vis* the decision of the enforcing authority. In such a case a Board of Appeal of technically competent personnel not necessarily connected with the local body, would be useful so that they can give an interpretation of the clause in the interest of the community.

The Chairman then requested Shri Deva Raj to present his paper—"Administrative Aspects of the Enforcement of Building Regulations". The enforcement of building bye-laws, he said, involved a most sensitive area of civic administration. No other aspect of the infringement of municipal laws, rules and bye-laws brought the citizen in such direct confrontation or even collusion with the municipal machinery. Long objection statements to building plans and their repeated rejections, unauthorised constructions, prosecutions, demolition orders and court injunctions are a part of the see-saw struggle between the municipal machinery and the private citizen undertaking to erect or re-erect a building, to sub-divide land or lay a street etc.

The end result is that in most cases, the unauthorised construction survives the din and fury and after protracted correspondence and spot inspections, a revised plan is finally accepted as a compromise in lieu of a compounding fee.

The unauthorised construction, he added, was often alleged to be encouraged and abetted by the incorrigible mistry or construction agent, the building inspectors and the inevitable wirepullers. There was a feeling, often exaggerated, that a law abiding citizen following the rules strictly would hardly be able to complete construction for years, involving wasteful expenditure. The purpose of his paper, he remarked, was just to give an indication of some of the factors that contribute to this state of affairs.

There was considerable delay, he said, in the sanction of plans. Most of the municipal laws provide for a limit of 30 to 60 days within which plans had to be disposed of—either sanctioned or rejected with objections. In most cases, the plans were returned as being incomplete or being in some specific respects contrary to bye-laws or for lack of necessary documents. Often the citizen has to prepare a revised set of plans and resubmit them. It would not be surprising if a good number of them were returned again, sometimes with fresh objections.

The delay in sanction, continued Shri Deva Raj, was also caused by the need of reference of a plan to a number of authorities such as the Health Office, the Town Planning Organisation if any or the State Public Works Department and the like. They may even be returned for obtaining clearance of some such authorities that may have some relationship to the site in question.

The submission of defective and incomplete plans was generally due to the absence of adequate number of qualified and experienced draughtsmen and architects in all but the major cities. There was also a tendency on the part of the citizen to cut expenses, on what they regard as an intangible service. Even the approved draughtsmen or architects were known to make plans that may be contrary to the rules and conditions

applicable to a site.

It was not always convenient, he emphasised, to get plans prepared by architects stationed and practising in other towns and cities as the bye-laws were not always quite standardised. An architect practising in one town may find his plans in conflict with the rules and bye-laws in another town, in some minor details or peculiar local features. Even in the same town the zonal plans may vary. In Chandigarh, for instance, the construction of a garrage, annexe or servant's quarter in the side setback area may be allowed for a 1000 sq. yds. plot but not for a plot measuring 1300 or 1500 sq. yds. The width of front, side and rear-yards varied not only from town to town but even for plots of similar sizes in different areas of a town. Attempts to get towns and cities to adopt standardised codes had not succeeded so far.

The sanction of the building plans, he cautioned, was by no means the end of the story. In fact it was the period of construction and ultimate completion of the building that marks the most eventful part of the citizen's experience with the municipal machinery. The bye-laws might require a notice to be given by an intending builder about the time he proposes to start construction. Most of the older bye-laws did not provide for it. In any case this part of the obligation was often ignored both by the citizen and the municipal authorities, who fail to undertake inspection of the layout of the building at the very outset which might have helped in avoiding a good part of the later objections about variations from the sanctioned plan and violation of bye-laws. There was hardly any building that would be completed in strict conformity with the sanctioned plan. There were no regular inspections, he added, for check-up and advice by the municipal staff.

The Building Inspector, he observed, was, however, vigilant enough to serve a notice of unauthorised construction at some stage. Flagrant breaches may, however, start a chain of demolition notices, stay orders, court injunctions and the like, while the construction may be carried on, so that it may often be too late to enforce demolition. The situation was more complicated

if it was a case of re-erection, additions and alterations.

The deviations from the sanctioned plans, continued Shri Deva Raj, may or may not be contrary to bye-laws, and the latter make the final approval of a plan more difficult. Some municipal Acts or bye-laws make the obtaining of a completion certificate compulsory. The occupation of a building [without such a certificate being an offence. Most of the older bye-laws, however, made no such provision but in any case unauthorised constructions have to be incorporated in a revised plan. The sanction of a revised plan and issue of a completion certificate, he remarked, was often a protracted process and takes much longer time than the sanction of the original plan. Houses are often occupied before a completion certificate is issued. In the meantime, the citizen must pass through an anxious period of demolition threats and court prosecutions, until the matter is compromised or payment of a compounding fee, which leaves a considerable room for discretion exercised often in respect of municipalities by the elected Chairman or a small Committee. This introduces a considerable element of speculation and latitude about the extent to which unauthorised construction can be indulged in.

It has been seen, continued Shri Deva Raj, that the process of sanction of plans was made very much easier and expeditious and the extent of deviations from plans considerably diminished, if there was a corps of draughtsmen, architects and supervising engineers for various categories of buildings, duly approved and licensed according to precise rules and bye-laws. They act as bridges between the citizen and the administration and should be made answerable, at least, for any violation of bye-laws.

Referring to the problems of smaller towns, he pointed out, that most municipal bodies had at best only a loose code. The smaller towns and cities also generally failed to attract the services of the qualified architects. That, he said, pointed to the need of opportunities of professional education and training at the intermediary level to meet the needs of urban areas. The architects often complained about the lack of competence and due knowledge and training of the building inspectorate and

even of the civil engineers, who were often entrusted with the duties of processing the sanction of building plans, but lacked the training or the experience or even the will to learn and understand the architectural aspects of a building plan. The building staff was often kept much too busy not with technical regulation of construction, but in dealing with prosecutions, service of notices and demolition orders, and actual execution of such orders. The approach was administrative or bureaucratic. The municipal staff, therefore, needed not only training in some architectural and enforcement aspects of building plans but an orientation of attitude in dealing with the prospective builder by way of offering guidance and direction through timely inspections to avoid any serious pitfalls. The disposal of plans could also be expedited by doing away with frivolous and minor objections and first hand examination of the plan and the necessary documents at the time of submission.

He added that there was equally a need of citizen education and building up of civic traditions to discourage and to disapprove any gross violations such as encroachment of setback areas, lack of proper window space and the like. The pressure groups must in no case plead on behalf of such recalcitrant elements, in the larger interests of their city.

Shri Deva Raj concluded that there was need for simpler standardised building codes that should take into account not only the ideal but also the limitations of the citizens and the difficulties of the urban local authorities, who had to enforce the codes. Sometimes the documents and details required to be submitted were too ambitious and superfluous. The setbacks etc. laid down proved excessive in certain areas. The most significant failure of most building codes was to provide for a special treatment of the central areas. While a model standard building code provides for the ideal conditions, the building bye-laws of a municipality were conditioned by the requirements of the more congested parts of the towns. Conditions in the central areas, he said, were such that it was impossible to enforce any modern code in respect, particularly, of such matters as size of the plot, setback areas and height of building.

The task of ensuring against ugly and unhygienic constructions and promoting pleasant environments calls for a cooperative effort on the part of the municipal authorities, the experts, the lay citizens and the political groups. The need, he said, was not only for good bye-laws but also for their enforcement in a manner as to give a face-lift to the cities. The chairman then requested Prof. G. B. Krishna Rao to give his observations on the problems relating to Building Bye-laws. Prof. Rao read out that portion of his paper relating to Building Bye-laws which he had omitted in his earlier address.

The building regulations, he said, were usually framed by the state government under the powers conferred by the Municipal Act. In some Acts like the Calcutta and Andhra Pradesh Municipal Acts the building regulations constitute a schedule to the Municipal Act. The building bye-laws, if enacted, were applicable to all sites within the municipal area. They specify standards relating to structural safety, internal dimensions of rooms, light and ventilation, open spaces to be left around buildings, and sanitation. Under the Municipal Act, no party can construct or reconstruct or make additions or alterations to a building without obtaining a licence from the municipality, which takes into account the building bye-laws as well as provisions of Municipal Act and related laws while dealing with the building applications.

In some cities, he cited, the executive authority of the municipality had powers to pass final orders on the building applications while in some other municipalities, the applications are required to be placed finally before a Standing Committee of the Council. The Director of Town Planning of the State or the appropriate committee of the municipality as the case may be, he added, usually had powers to grant exemptions from the operation of building bye-laws in special cases of hardship.

Most of the standards prescribed in the bye-laws, according to Prof. Rao, were obsolete and outdated as some of these were framed more than two decades ago. It looks absurd, he observed, to control modern architectural design with those

outdated bye-laws. The bye-laws, for example, usually required a minimum height of 10 ft. for a living room and also a thickness for wall which was uneconomical and, therefore, he emphasised, the need to bring them up-to-date. The trouble was that standards prescribed in building bye-laws had become the maximum to be followed by the developers instead of being the minimum they were intended to be.

Prof. Rao commented that the standards prescribed in building bye-laws were uniformly enforceable in all parts of the city irrespective of particular needs of any locality. The existence of more than one authority exercising development control caused unnecessary harassment to the developers, who had to apply to concerned authorities for building permits and it was well-known that there was much slackness and corruption as well as interference by elected representatives in the enforcement of building bye-laws. It was worth considering, he emphasised, whether in the metropolitan areas, one ought to take away the development control from the hands of the municipality, and entrust it to City Improvement Trusts or a government department, who could look after development control with better results. He concluded by saying that while it was a laudable objective to seek more legal powers for controlling the urban environment, it would be worthwhile to give deep thought to the working of the machinery which was now charged with the responsibility of enforcing the laws. In India, he commented, the need was to initiate radical reforms in the local self-government institutions before one could make any real headway in urban planning or in improving the quality of civic services in the cities.

Discussion

At this stage the chairman threw open the subject for discussion by the participants. There was an intensive dialogue on the subject of building bye-laws among Shri Simha, Shri Deva Raj, Shri S. Jagannathan, Shri S. G. Bose-Mullick, Shri S. C. Khandelwal, Shri M. L. Sharma, Shri Mahesh Joshi, Shri S. C. Kapoor, Shri G. D. Bahri and Shri H. K. Ganatra. The first speaker suggested that the planners could easily eliminate

service lanes. He objected to the dilatory procedure of getting the plans approved by the local body especially when more than one local bodies were involved. The next speaker underlined the need of adjusting the bye-laws to the change in circumstances. The situation demands, he said, to cut the administrative routine as far as possible for the convenience of the citizens. The authorities, he alleged, always thought in terms of laying down high standards but the needs of poor were being forgotten in the process.

The next speaker referring to the problem of interpretation of bye-laws suggested that some method should be found out to enable the bye-laws to cope with the changing situation.

Another participant, referring to the problem of unauthorised construction said that the authorities could either condone the irregularity, impose penalty, regularise the construction or demolish the irregular construction, but according to him the need of the hour was to find a solution which was both preventive and curative in nature. As regards new construction, he maintained, that even the best architect could not construct a building which was completely in consonance with the bye-laws. He concluded by saying that there was a need to relax the various regulations regarding number of storeys etc.

The next speaker suggested that the building once constructed should not be scrutinised and all the defects need to be avoided only at the planning stage. He further suggested that the colonies which had already come should be developed by the owners but the new colonies ought to be developed by the municipalities after collecting the development charges. About slums, he said, the need was to remove the slums out of the city and prevent the formation of the new ones.

The chairman intervened at this stage and emphasised the need to simplify the zonal regulations. The National Building Code which was under preparation should incorporate and simplify the zonal regulations and the procedure for the approval of their plans should also be incorporated. He added that the preparation of the zonal plans should have been done simultaneously with the preparation of Master Plan. The two-

processes were very much interlinked. The chairman referred to one of the observations that the plans for central and state governments were not subject to scrutiny and check by the local bodies. He supported the call for empowering the corporation to scrutinise the plans of C. P. W. D. or P. W. D. as the case may be. He concluded his remarks by saying that the size of the living room ought not be based on *ad hoc* considerations but should be the result of functional studies carried out in planning the house. He suggested that a positive attempt should be made to modify the building bye-laws in that direction. Coming to the question of the thickness of the wall for which a provision was made in the bye-laws for the load bearing structure, nothing he pointed out was said about the other type of structures in this connection. As regards height of the floors the studies carried out by National Building Organisation show that this varies from region to region. There may be a case to reduce this height to 8 ft.-6 inches for making provision of fans and the bye-laws on this, he said, needed revision.

The speaker who spoke subsequently referred to the complaints that the C. P. W. D. was not adhering to the requirements and the Corporation had to take certain action against some of the violations. The building bye-laws no doubt be amended to reflect the developing situation but he cautioned that frequent amendments would only defeat the purpose for which they were meant. Again amendment to building bye-laws, he added, was not a simple affair. It would have to be referred to several agencies and would take 2 to 4 years for clearance. However attempts should be made to streamline the machinery for sanctioning building plans. The Delhi Corporation Act provided that building plans, would be sanctioned within a period of 60 days but an attempt was made to clear them within one to two weeks. In the case of old Delhi however, he said, a limit of 30 days had been laid down. The Delhi Municipal Corporation, he continued, had formed a building plan committee for the city as a whole and building committees for the zones. The whole Delhi had been divided in plan zones and he claimed that good deal of decentralisation of authority for the

benefit of the citizen had been achieved under that system. The zonal engineers, he said, had to give weekly report as to how many cases were received and disposed off by them, as well as the attempts made to eliminate the bottlenecks for any undue delays. He claimed that all the steps had not only cut down the delays but also reduced the scope for corruption. He concluded by saying that the most important problem raised by the Master Plan was to reduce the density of population. He did not agree with the suggestion, to allow construction of old houses up to three storeys on the old specifications. He thought that this might bring chaos. The need, he said, was to reduce the density and to take people out so as to provide schools, parks, dispensaries and welfare centres etc. to the citizens

The next speaker referred to the standard building plans for different sizes of plots, that the corporation had at Bombay and the people, he said, could buy them, without going through the irksome procedure of getting them cleared. Then he referred to the need of sanctioning building plans even without provision of lifts. The need, he said, was to encourage more and more multistoreyed buildings even on smaller plots. He favoured fiscal measures as deterrent to violations rather than dismantling the structures. The next speaker, however, did not favour the fiscal deterrent and pointed out that this would only encourage unauthorised construction rather than checking it. At this stage the chairman intervened to say that the main problem was one of achieving the proper fusion between the architectural and implementation needs of building bye-laws. He concluded the forenoon proceedings by thanking the participants for their cooperation and participation in the deliberations.

FOURTH SESSION

Discussion

The afternoon session began with Prof. G. Mukharji thanking Shri M. N. Thimaiah, Municipal Commissioner, Mysore, for agreeing to preside over the deliberations. He presided over part of session as he had to leave in between and

Kumari Surrinder Saini took over from him. Apart from Prof. G. Mukharji and Shri M. N. Thimaiah, Dr. B. D. Raheja, Shri Deva Raj, Prof. G. B. Krishna Rao, Shri B. N. K. Gowda, Shri D. Ajitha Simha, Shri B. B. Nanda, Shri S. C. Khandelwal and Kumari Surrinder Saini put across their viewpoints in this session. The deliberations began with Shri Deva Raj giving his observations on the subject. Shri Deva Raj emphasised that the building bye-laws as prevalent today were outdated and cumbersome. He quoted examples of even some corporations where the bye-laws had remained unchanged, having failed to take cognisance of the latest developments in construction industry etc. As a consequence, he said, it had become imperative to help the municipalities to revise their bye-laws. He concluded his observations by saying that though the standards and bye-laws vary considerably from place to place, it should not be difficult to lay down certain uniform norms acceptable to architects, the engineers and the administrator. He emphasised the need of trained people, who could be entrusted with efficient administration of building bye-laws.

The next speaker criticised the tendency to have the existing income standards as determinants of minimum plot area and emphasised the need to take into account the anticipated social and economic changes in the big cities. He referred to the apathy of the State and Central Governments towards the needs of the local authorities and attributed this lukewarm attitude to the dominant 'rural lobby', in higher echelons of politics. Another speaker attributed the limitations of the bye-laws to the overall provisions of the Municipal Act, under which these had been framed, and called for necessary amendments in the Municipal Act itself. It was strange, he said, that the Municipal Commissioner should have more powers than the councillor with regard to the construction of buildings under the Municipal Act. The speaker who spoke subsequently stressed the need of proper planning in cities. The problem, he said, was : whether the preparation of the bye-laws could be left to the municipalities and corporations or some Central authority should help these local bodies to frame the rules. He suggested

that the Indian Standards Institution should take up this job to lay down minimum national standards. He emphasised the necessity of a regional plan in this context. The local municipalities should draw up standard plans suitable for each area. There should be legislation that the construction in that area has to be in accordance with the standard plan. He added that it would be advisable to permit certain average size of building plans with more than two dwellings.

At this stage Kumari Surrinder Saini sought the leave of the Chairman to say something. She emphasised the need for revision of building bye-laws to minimise the harassment of the citizen. It was strange that the citizen had to apply for additions and alterations through an architect and incur unnecessary expenditure. She posed a question : why cannot the architect of the local bodies inspect the site and guide the citizens at nominal cost ? Even the procedure for getting the building plans approved was very irksome especially if a number of local bodies were involved. In the case of leasehold plots she added that there was another formality of getting the approval of the D. D. A. even if the local body had sanctioned the plan. So she suggested the constitution of one clearance agency for all this, on which different authorities could be represented. Sometimes directives were issued to refuse the the sanction of the plans as the corresponding programmes of municipal services like water had not been completed. That only added to the frustration, resentment, and hardships of the citizen, she said.

Though the Master Plan, according to her, was a necessity, one could not at the same time ignore the realities. She quoted the example of some of the redevelopment plans of Azadpur, where she found to her surprise that built-up area were shown as vacant lands. One gets upset, she commented, when thousands of families had to be uprooted, just to clear the area for keeping it 'green'. The only remedy to this state of affairs was to reserve some areas in the same zone, from where the people were being uprooted under the redevelopment plans.

At this stage, the Chairman requested Kumari Surrinder

Saini to preside over the deliberations. The discussion continued with Prof. G. Mukharji supporting the contention of the participants to empower the local body to sanction the building plan of the government or any other department. There was provision, he said, in the Delhi Development Act, under which the Central and State government plans required examination by the urban local body. In no other part of the country there was such a rule, he said. At the time of formulation of this Act, there was great deal of opposition from the C. P. W. D. about the inclusion of this provision in the Delhi Development Act.

He referred again to the rigidity of building bye-laws and said that there was nothing permanent even about simple human affairs. It was not good to sit on building bye-laws, zonal regulations or Master Plan, rather the need was to consider the possibility of a set of bye-laws which could be applicable to what he called temporary houses that the people want just for shelter.

Turning to the problem of unauthorised construction, continued Prof. Mukharji, there were two aspects of the problem—the deviation of actual construction from the sanctioned plan and the unauthorised construction without a sanctioned plan. In the western countries the former one, he said, was more common. He emphasised that in India the need was to know the people who were guilty of unauthorised construction. It was the poorest class of people who could not afford to own a house, and were struggling for a shelter. It was not a question of violating the bye-laws but one of finding a shelter. He cautioned that the seminar would be a failure if we did not find an answer to the problem. He posed a question: "why cannot we evolve bye-laws in consonance with the needs of the poor?"

Coming to the problem of reducing the minimum size of the residential plot, he said, that in the beginning, there was stiff resistance to such a proposal from no less a person than the late Pandit Nehru himself, but subsequently he agreed to it. The way the land prices were increasing, unless the government builds multistoreyed buildings with flats, an individual would not easily have a house. Even the abolition of service lanes

under certain circumstances would be appropriate. In this connection he referred to one of the earlier plans of D. D. A. which did not contain a service lane.

He concluded his observations by saying that the density prescribed in the plans was artificial and was more relevant to an affluent society. In India, he said, one was used to high density and if one permits this, then costs on account of construction, services, maintenance, administration etc. could be reduced significantly.

The next speaker expressed the hope that the engineers and architects on the job would consider the situation in the light of comments offered at the seminar. He proposed that it would be in the fitness of things if some resolutions were passed.

Dr. C. M. Palvia, Joint Director (Socio-Economic), National Building Organisation, New Delhi, observed in his paper—"Need for Reformulation and Quantification of Basic Concepts in Respect of Building Bye-laws" that the future was unmistakably looking ahead to make proportionately more demands for housing out of available capital and current resources. The welfare, health and progressive development of the citizens, he added, was the prime guiding philosophy that spurred the spirit, action and body of the bye-laws, and therefore it was required to be in conformity with the dynamism of the social and economic variables of the society. As no one single statistical indicator could measure all aspects of housing conditions—a number of indicators had been devised while keeping their number to the minimum—so that they directly correspond to the basic housing requirements of adequate shelter, privacy and sanitation as reflected by the availability of permanent dwelling, density of occupation and the provision of essential facilities. Some supplementary indicators had also been listed he added.

There were four basic indicators which were believed to reflect universally recognised elements of housing such as protection against weather, the safeguarding of privacy, a protected water supply, and provision of sanitary facilities. Those

elements are netted by the following four basic indicators :

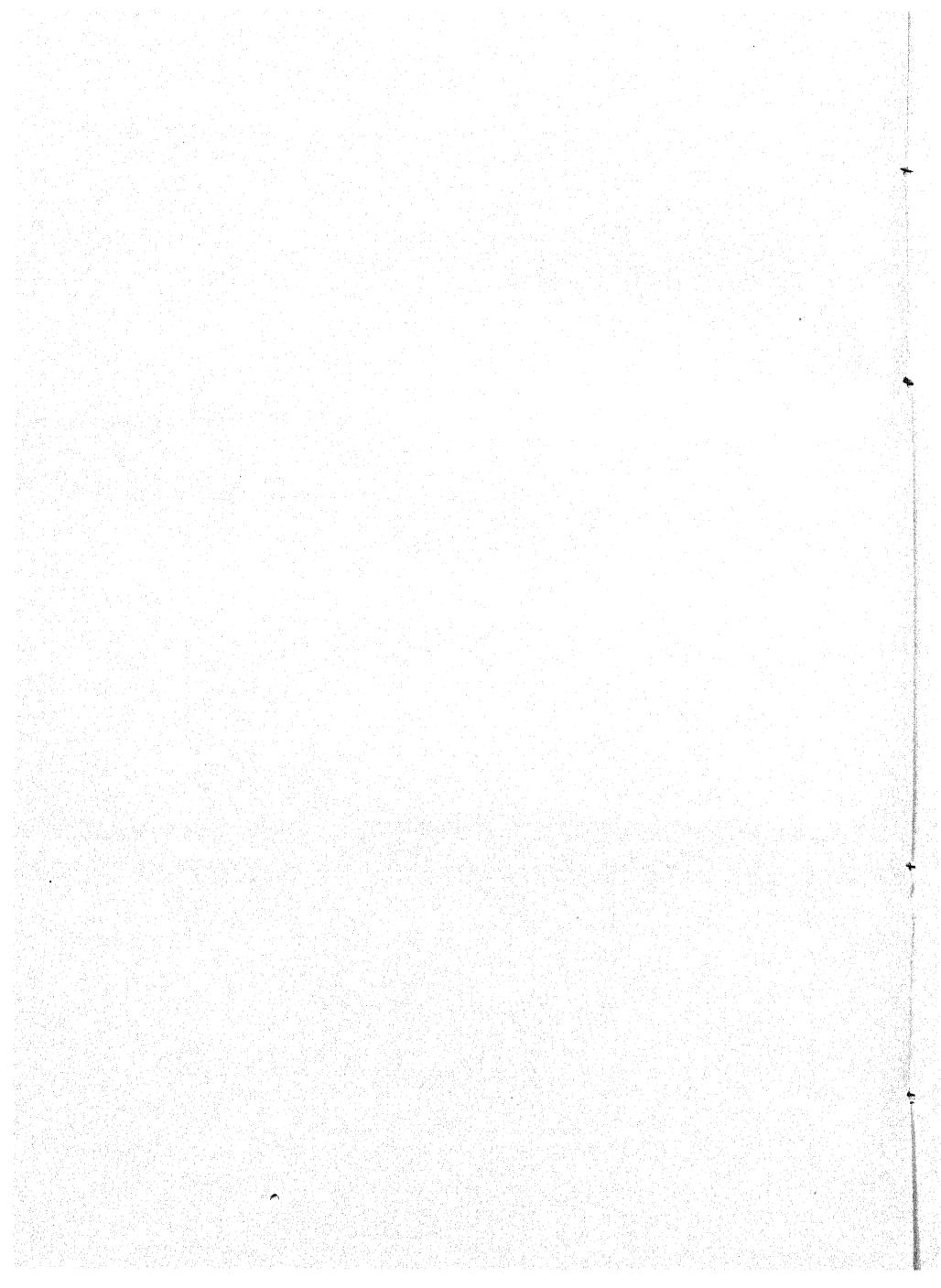
- (1) per cent of population living in dwellings,
- (2) per cent of occupied dwelling with three or more persons per room,
- (3) per cent of occupied dwellings with piped water inside the dwelling or outside the dwellings but within 100 meters, and
- (4) per cent of occupied dwellings with toilets.

The supplementary indicators which could provide additional information, he said, related to per cent of population living in housing units classified as 'rustic', 'improvised' etc., average number of persons per room for occupied dwellings only, per cent of occupied dwellings with flush toilets (urban), per cent of occupied dwellings with toilet other than flush and index of dwelling construction in relation to estimated requirements. He emphasised again that there should be reformulation and quantification of basic concepts relating to building bye-laws so that they could catch the underlying spirit and did not operate only on the outskirts of the frame.

The Chairman then expressed her happiness that it was possible for the Institute to hold such a seminar. She felt that this discussion among technical and non-technical people would help to improve the situation for the common man. She cautioned that it would be deceiving oneself, if the plans took into account only the affluent. She also cautioned against adopting everything that comes from the west. One must try to adjust plans to local conditions. It was necessary, she said, to see the economic capacity of an average Indian, the needs of the womenfolk etc. and unless that was done, it would be difficult to implement the plans. She supported the plea made by the participants that bye-laws ought not to be rigid. Referring to the suggestion to pass some resolutions she remarked that the purpose would be served if a comprehensive report of the proceedings was circulated. She concluded her observations by proposing a vote of thanks to the Director, IIPA, Prof. G. Mukharji, and others, for holding and making the seminar a success. She also thanked the experts for presenting the papers.

In the end Prof. Mukharji thanked the Chairman and the participants and was happy that the high level discussions were very frank. In many seminars, he remarked, the proceedings go off the rail and appropriately nothing of that sort had happened in this seminar. With these remarks the two days' proceedings came to an end.

APPENDICES



APPENDIX A
LIST OF PARTICIPANTS

1. Shri Hans Raj Gupta	Mayor, Municipal Corpora- tion, Delhi.
2. Shri S. C. Khandelwal	Councillor, Municipal Corpora- tion, Delhi.
3. Shri Kishore Lal	Councillor, Municipal Corpora- tion, Delhi.
4. Shri Hira Nand	Councillor, Amritsar Munici- pal Committee.
5. Shri Mehanga Singh	Councillor, Amritsar Munici- pal Committee.
6. Shri Mahesh Joshi	Corporator, Municipal Corpora- tion, Indore.
7. Shri Namdeo	Corporator, Municipal Corpora- tion, Indore.
8. Shri J. M. Avasthi	Engineer, Municipal Corpora- tion, Indore.
9. Kumari Surinder Saini	Sr. Vice President, New Delhi Municipal Committee.
10. Shri H. K. Audichya	Councillor, Municipal Council, Kota.

BUILDING BYE-LAWS

11. Shri Madan Lal Sharma	Councillor, Municipal Council, Kota.
12. Shri H. K. Ganatra	Councillor, Municipal Corporation, Bombay.
13. Shri M. N. Thimaiyah	Councillor, Municipal Corporation, Mysore.
14. Shri V. P. Dhamija	Councillor, New Delhi Municipal Committee.
15. Shri B. N. K. Gowda	Councillor, Municipal Corporation, Mysore.
16. Shri G. D. Bahri	Deputy Commissioner, Municipal Corporation of Delhi.
17. Shri B. B. Nanda	Executive Engineer, Municipal Corporation of Delhi.
18. Shri H. B. Dass	O & M Officer, Municipal Corporation, Delhi.
19. Shri J. M. Benjamin	Sr. Architect, CPWD, New Delhi.
20. Shri S. K. Dutta	Sr. Architect, CMPO, Calcutta.
21. Shri P. B. Rai	Additional Town & Country Planner, Town & Country Planning Organisation, New Delhi.
22. Shri D. Ajitha Simha	Indian Standards Institution.

23. Prof. G. B. Krishna Rao
Assistant Professor, School of Planning and Architecture, New Delhi.

24. Dr. R. B. Das
Department of Public Administration, Lucknow University, Lucknow.

25. Shri Deva Raj
O.S.D. Ministry of Health, Family Planning & Urban Development, New Delhi.

26. Dr. C. M. Palvia
Joint Director (Socio-Eco.), National Building Organisation, New Delhi.

27. Shri S. G. Bose-Mullick
Vice-Chairman, Delhi Development Authority, New Delhi.

28. Shri K. C. Mathur
Engineer Member, Delhi Development Authority, New Delhi.

29. Shri K. N. Krishnamurthy
Engineer Officer, Delhi Development Authority, New Delhi.

30. Prof. G. Mukharji
Director, Centre for Training & Research in Municipal Administration, IIPA, New Delhi.

31. Prof. V. Jagannadham
Professor, IIPA, New Delhi.

32. Dr. V. S. Desikachari
Consultant, IIPA, New Delhi.

33. Dr. B. D. Raheja
Centre for Training and Research in Municipal Administration, IIPA, New Delhi.

34. Shri M. Bhattacharya	Centre for Training and Research in Municipal Administration, IIPA, New Delhi.
35. Shri R. S. Gupta	Centre for Training and Research in Municipal Administration, IIPA, New Delhi.
36. Shri A. Datta	Centre for Training and Research in Municipal Administration, IIPA, New Delhi.

APPENDIX B

WORK PROGRAMME

FIRST SESSION

March 11, 1969, 10.00 a.m.—1.00 p.m.

Inauguration by Shri Hans Raj Gupta, Hon'ble Mayor,
Municipal Corporation, Delhi.

Paper presented :

- (i) Sub-Division Regulation, Zoning and Building Bye-law
B. D. RAHEJA
- (ii) The Place of Zoning and Sub-division Control in
Municipal Administration
SHRI P. B. RAI
- (iii) Selected Aspects of Sub-division Control in an Urban
Area
S. K. DUTTA

Discussion by participants.

Chairman : Kumari Surrinder Saini

SECOND SESSION

March 11, 1969, 3.00 p.m.—5.00 p.m.

Paper presented :

- (i) Development Controls through Zoning Laws, Sub-division Regulation and Building Bye-laws
PROF. G. B. KRISHNA RAO.

Discussion by participants

Chairman : Dr. R. B. Dass

BUILDING BYE-LAWS

THIRD SESSION

March 12, 1969, 10.00 a.m.—1.00 p.m.

Papers presented :

- (i) A Note on Housing and Building Bye-laws in Delhi
SHRI V. V. BODAS
- (ii) Preparation of Building Bye-laws
SHRI D. AJITHA SIMHA
- (iii) Administrative Aspects of the Enforcement of Building Regulations
SHRI DEVA RAJ

Discussion by participants

Chairman : Shri H. K. Audichya

FOURTH SESSION

March 12, 1969, 3.00 p.m.—5.00 p.m.

Discussion by participants

Paper presented :

Need for Reformulation and Quantification of Basic Concepts in respect of Building Bye-laws

DR. C. M. PALVIA

Chairmen : Shri M. N. Thimaiyah
Kumari Surinder Saini

